

Solutions for Your AGGREGATE Applications



Aggregate and coal handling industries have unique bearing needs that require the most rugged bearings available to endure the harsh conditions. Bearing manufacturers view these applications as the ultimate durability test for their products.

For example, QM Bearings developed simple contamination collars that mount on the bearing shaft and fit into a labyrinth within an almost indestructible urethane cover and utilize a v-ring seal for unsurpassed protection against contaminants. Urethane was also used to produce a separate triple lip primary seal specifically for the aggregate and mining industries to guard against abrasive wear.

Poor quality bearings that quickly fail due to contamination and lubrication problems don't deserve your money. Blue Brute® bearings, made by QM Bearings, are uniquely designed to meet your needs. For example, choose from up to 15 kinds of primary and secondary seals. Interchangeable with most other bearings, Blue Brute bearings seal out contaminants, accept misalignment, are reasonably priced and last a long time.

One of the reasons why more and more Blue Brute bearings are chosen for demanding aggregate applications is because you can select from the widest range available of locking styles, seals and housings. Our innovative approach results in bearings that last longer than competing products, yet you don't pay extra for bearings made your way.

Shock load

conditions exist:

- Contamination
- Low to moderate speeds

Radial and thrust loads

Blue Brute[®] bearings

are ideal for applications when any, or all, of these moderate to extreme

Possibility of unavoidable misalignment

Add up all the product advantages resulting from a wide range of precision-made locking styles, seals and housings and you've got a bearing solution that is ideal for your application.

- Accommodates shaft sizes from 1 7/16" to 7" and most metric sizes (varies by series)
- Built to order for quick deliveries
- Rugged steel housings are standard and include a lifetime housing breakage guarantee
- External covers for extra sealing protection (for most bearings)
- · Easily converted from fixed to floating in the field
- Highest load ratings in the industry (V-Lock[™] series)
- Eccentric lock series guaranteed to not come loose in reversing applications on precision ground shafts
- · Fifteen superior primary and secondary seal choices
- Standard pressure relief valves prevent over-lubrication
- Tighter manufacturing tolerances compared to our competition
- Dimensionally interchanges with virtually all other mounted roller bearing units
- Machined feet for one-time shaft alignment on all pillow block styles
- Standard withdrawal holes on all piloted flange units
- Patented double-taper design of V-Lock bearings makes installation and removal easy, no need to set clearances (impossible to overtighten) and fretting corrosion is virtually eliminated.

IF YOU COULD BUILD YOUR OWN CUSTOM BEARINGS WHAT WOULD YOU BUILD?

That's the question QM Bearings faced many years ago when the company decided none of the bearings available were good enough for the sawmill and logging machinery it manufactured.

QM Bearings thought they could design a better mounted spherical roller bearing because they understood bearing problems from the perspective of a bearing user. After producing a better bearing that proved itself in harsh environments, the company decided to exclusively focus on making bearings for everyone who needed a durable product with benefits not matched by the competition.

The same approach to designing and manufacturing innovative bearings that work flawlessly in a customer's most demanding application has spread to couplings. In over 40 countries, thousands of customers use the company's products with confidence. When you buy a QM Bearings product, you can be assured the product will meet or exceed your expectations. We built it with you in mind. Built to last.





INTRODUCING V-LOCK!

Introduced in January 2006, V-Lock is the newest locking style from QM Bearings specifically designed for easy 10-minute installation, twice the holding capability of any other bearing design and the ability to withdraw the bearing off the shaft.

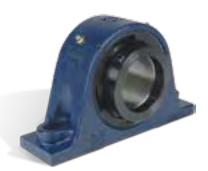
An ineffective seal can quickly ruin any bearing and suddenly increase the total cost and inconvenience of your purchase.

Think of seals as inexpensive insurance to protect your bearing investment. QM recognizes the importance of well designed seals and offers 15 kinds of seal choices. Consult your local distributor for guidance on how to choose the best seal combination for your application.

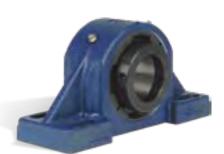
- Triple lip: nitrile rubber (M) standard, Viton $^{\textcircled{R}}$ (N) and urethane (O)
- Double lip: nitrile rubber (B) and Viton $^{(\!R\!)}$ (C)
- High-speed labyrinth: Teflon (T) and mechanical (ML)
- Closed end covers (CS)
- Open end covers (CJ/CK/CV) with triple lip (DR) or v-ring (VR) seal, or contamination collar (CC)
- Piloted flange cartridge backing plate (Y) with triple lip (DR) seal or contamination collar (CC)
- Flange block backing plates (UFP and CFP)



All housings made by QM Bearings are manufactured from rugged steel instead of weaker cast iron. Steel housings don't pound out in harsh applications. We're so confident in the sturdiness of our housings that we offer a lifetime guarantee against breakage.



TWO-BOLT PILLOW BLOCK



FOUR-BOLT PILLOW BLOCK





FLANGE BLOCK



PILOTED FLANGE CARTRIDGE



CARTRIDGE BLOCK



TAKE-UP BLOCK



BLUE BRUTE BEARINGS PAY FOR THEMSELVES!

If you're using bearings that become so contaminated that you purge grease out of them to remove the contaminants, then QM Bearings has solution for saving you as much money in maintenance costs as you paid for a bearing.

Every time you re-lube a bearing it costs between \$1.50 to \$2.50. Lube daily and it adds up to \$390 per year (based on \$1.50 unit cost). Re-lube a Blue Brute bearing every 21 days, because the seals and covers prevent contamination, and the annual cost is only \$26.07. The difference, \$363.93, will cover the purchase price of most Blue Brute bearings.

Calculations were based on a QMPF20J315S: Bearing load less than 10,000 pounds, L10 life more than 100,000 hours and 40-hour work week.

Perhaps you are replacing an existing bearing and you already know what kind of locking style you need. Or maybe you're looking for a more durable bearing than what you've been using. Either way, you'll be glad we offer four locking styles.

Eccentric Lock:

Outstanding holding in heavy thrust, reversing or shock loading

Concentric Lock [set screw]:

Two set screws at 60° provide maximum holding with minimal run out and simple installation. Double collar version available Q1 2006.

Tapered Adapter Lock:

Superior drop in dimensional replacement for split cap units and straight bore bearings for highest load ratings

V-Lock Double Tapered Lock [patented]:

Easy to install and strongest locking design available (patented design)

SWTCH

IT'S EASY TO SWITCH TO QM BEARINGS

Blue Brute bearings are direct replacements for virtually all comparable bearings in use. Ready to switch or want to learn more about which Blue Brute bearing is ideal for your application? See the interchange guide in the QM Product Catalog or online at www.qmbearings.com. Better still, contact your local distributor or QM representative (listed on the QM website) or call (800) 661-5568 or (360) 384-6673.



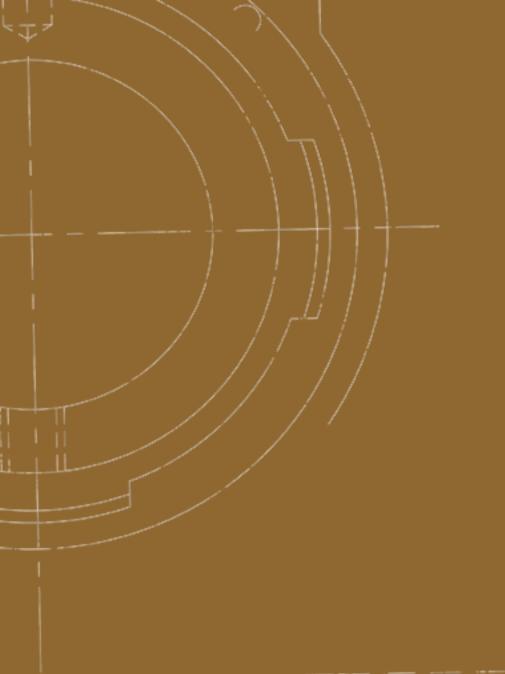
BLUE BRUTE BEARINGS CONFIGURATION

		Primary Seals These seals are installed between the inner ring of the bearing and the housing. They are held securely in place by an assembly nut. Primary seals can be contacting or non-contacting, purging or non-purging and are available in several material compounds for different applications.						
	Housing Type	'M' Nitrile triple lip seal Contacting Self-purging	'N' Viton® triple lip seal Contacting Self-purging	'O' Urethane triple lip seal Contacting Self-purging	'B' Nitrile double lip seal Contacting Non-purging	'C' Viton® double lip seal Contacting Non-purging	'T' Teflon labyrinth seal Non-contacting Non-purging	'ML' Mechanical labyrinth seal Non-contacting Non-purging
	Pillow Blocks	s de la constante de la consta	4	4	1	4	4	¢
is Lock)	Flange Blocks	4	A	A	1	A	A	A
CL Series (Set Screw Lock)	Piloted Flange Cartridges	4	A	A	1	A	Í	A
CLI (Set 9	Take-Up Blocks	1	1	đ	1	đ	đ	4
	Cartridge Blocks	1	4	4	1	A	A	
	Pillow Blocks	1	1	1	1	1	4	
eck)	Flange Blocks	1	4	4	1	A	4	
EC Series (Eccentric Lock)	Piloted Flange Cartridges	1	4	4	1	4	4	
(Ecce	Take-Up Blocks	4	A	A	1	4	4	
	Cartridge Blocks	4	A	A	1	A	1	
ock)	Pillow Blocks	4	A	A	1	4	1	
Series Adapter Lock)	Flange Blocks	1	1	1	1	4	4	1
TA S ¢ pered Ad	Piloted Flange Cartridges	1	4	1	1	4	4	-(
(Tape	Cartridge Blocks	1	4	4	1	4	4	\sum
es apter	Pillow Blocks	1	4	4	1	4	4	
DV Series (Tapered Adapter Lock)	Flange Blocks	1	4	4	1	4	4	$\langle \rangle$
DV (Tape	Piloted Flange Cartridges	4	4	4	1	4	1	(5
ck)	Pillow Blocks	1	4	4	4	4	4	
ock inted tper Lo	Flange Blocks	1	4	4	1	4	4	B /E
V-Lock (Patented Double Taper Lock)	Piloted Flange Cartridges	1	1	1	1	4	1	
	Cartridge Blocks	1	1	1	1	A	A	

CHOICES FOR YOUR APPLICATIONS

Secondary S	eals and	Covers
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Secondary Seals and Covers In many circumstances bearings fail due to premature seal failure. This is usually the result of a tough operating environment or over lubrication. QM Bearings has developed secondary sealing covers that offer an extra sealing barrier as protection for the primary seal.									
These economical covers are easily outfitted on any Blue Brute bearing unit.									
with 'DR' Nitrile triple lip seal	with 'VR' Nitrile v-ring seal	with 'CC' Collar Contamination collar	'CS' Closed End Cover	with 'DR' Nitrile triple lip seal	with CC' Collar Contamination collar	'UFP' Backing Plate	'CFP' Backing Plate with 'CC' Collar		
1	1	A	4						
1	1	A	4			1	1		
4	A	A	A.	A	ø				
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4	1	4	4						
- 1		A CC	1						
1	1	1	1						
4	A	A	1						



DISTRIBUTED BY:



North American Locations: Western Canada - Prince George, BC Eastern Canada - Mississauga, ON Western US - Ferndale, WA Southern US - Irving, TX Eastern US - Cuyahoga Falls, OH

QM Bearings designs, manufactures and markets rugged Blue Brute[®] bearings, Quick-Flex[®] couplings and rigid compression couplings. The company's precise manufacturing methods and innovative solutions have won over thousands of customers in over 40 countries. For more information, visit **www.qmbearings.com** for the distributor nearest you or call **(800) 661-7991** or **(360) 384-6673**.

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